## #M {white-papers}

WordPress and Gutenberg: A fast, flexible, contextually enriched publishing experience

The world's most popular CMS is preparing for the future — are you?

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"Gutenberg is the first attempt at really challenging the writing paradigm in a more generalised context. I suspect that once Gutenberg goes mainstream and is fully experienced by a large portion of the general market, it will create a new baseline for user expectations in editing."

Anna Harrison,

Director of UX at Ephox (creators of TinyMCE)

#### **CONTENTS**



3

### Introducing Gutenberg

4

## A fast, intuitive editor experience

Building with blocks // 6 'Everything is a block' // 8

10

## Gutenberg in the newsroom

Personalisation and scalable revenue models // 11

12

## Changes and challenges

Backwards compatibility // 13
Transitioning legacy code // 13

14

Blocks of opportunity: What's next?

**17** 

## Human Made: WordPress, Gutenberg, and OSS

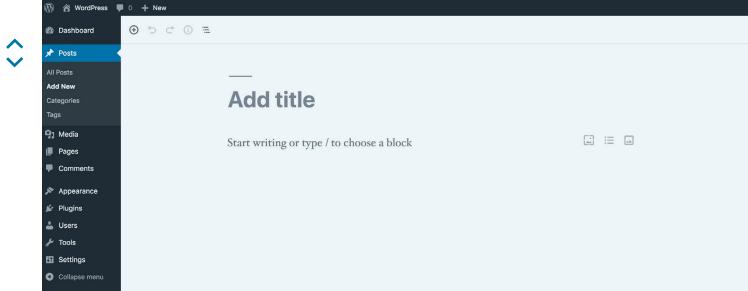
Human Made and WordPress // 18 Word on The Future – The Inside Track on Enterprise WordPress // 20

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## Introducing Gutenberg

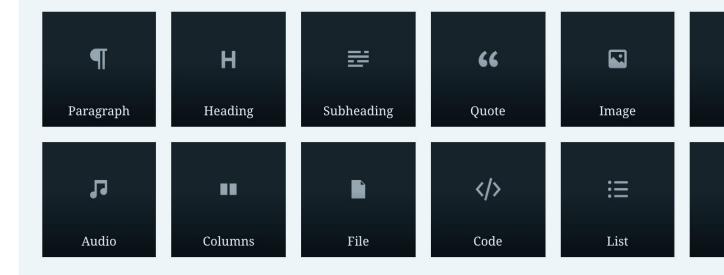
Powering 360° digital experiences with a modular approach to content

A dramatic change is coming to WordPress. The world's most popular Content Management System (CMS) is being equipped with a new editing framework that completely refreshes the user experience with a blockbased approach to content generation, optimised to create

rich media posts with elegantly organised and displayed layouts. The codename of this new model for editing and managing content has been Gutenberg, after Johannes Gutenberg who invented the printing press with movable type in the 15th century and revolutionised the way people consumed and shared knowledge and information. Over 500 years later, WordPress' Gutenberg project is set to equally revolutionise the way we build, edit, and publish online.

Gutenberg, the 'block editor', is the biggest change to WordPress in several years. This document explores what that change means for you as an agency, developer, or enterprise user of WordPress. Above: Gutenberg's clean interface.





# A fast, intuitive editor experience

Composing content in a consistent, contextually enriched interface

Gutenberg gives everyone, from editors to developers, a unified user interface for adding and editing complex content and layouts, making it much easier to manipulate content. Most importantly, the block-based approach replaces ambiguity with implicit structure.

Looking at the big picture, it's clear a lot of work has gone into defining precisely how to facilitate all the different roles involved with web publishing. The editor experience is just the tip of the iceberg for the future of Gutenberg, and already it is able to change the user experience for those building and publishing web pages in a variety of ways.

Editors and content creators
 will easily be able to work
 on mobile, and not have to
 deal with shortcodes and
 HTML (unless they want
 to). Formatting will also be
 much easier between text
 editors, such as Google Docs
 and Word. Content can be
 copied from one of these

Above: The variety of blocks available in Gutenberg. Screenshot from https://wordpress. org/gutenberg/

- editors into Gutenberg; the web application the text is copied from is auto-detected and content automatically converted into blocks.
  Embedding external content will also be made easier with options for YouTube, Reddit, Twitter, and Spotify links already integrated.
- dynamic landing pages and other online pages to drive traffic, engagement, and conversions. They can also become more efficient with experiments and iterations, and react faster and with more independence.
- Core developers will be able to use a common set of code and concepts to simplify how menus, widgets, and the editor work.
- Plugin developers can integrate into WordPress without having to build on top of TinyMCE, and plugins will also have an improved UI.

- Theme developers won't need to support different plugins or create their own page builders. There will be a standard portable way to create rich layouts, seamlessly and intuitively.
- Agency and Enterprise
   developers will have a
   vast new range of options
   for building out custom
   applications and workflows for
   their clients. These options will
   have consistent controls and
   interfaces and can be used
   to build highly usable and
   accessible new features fast.

#### **Building with blocks**

Gutenberg treats blocks as individual entities of content; a variety of different content 'types' can be identified, including paragraphs, headings, images, galleries, lists, buttons, embeds, pull-quotes, tables, and even widgets to pull in content from elsewhere on the site, such as a list of posts. These types are the smaller units that make up the content of pages.

The block editor defines all these different elements in consistent ways, and how you interact with them is designed to be intuitive and elegant. Blocks can be moved, manipulated, combined, and saved as 'reusable' blocks. They are universal content components, more flexible, and more usable than ever before.

Every block has its own unique semantic value and all blocks have the flexibility to be moved around relative to each other. Blocks can be arranged in any number and type on a page, each with its own distinct behaviour and function, but this is not where opportunities end:

- Custom blocks can be built to aggregate and display content from third-party APIs, applying local CMS logic to remote data sets and pushing WordPress up the stack of Everything-as-a-service.
- Block templates allow predefining of a set of blocks for a specific purpose, for example as a landing page template where editors only need to fill in the default content structure and move blocks around as needed.
- Parent and Child blocks reflect the concept of relationships between blocks; multiple 'Child' blocks can be assigned to a 'Parent' block. This group

of nested blocks lives within the 'Parent' category within the block menu and only appears when the original 'Parent' block is selected. This creates an environment where Parent blocks have a more standardised UI, and prevents an overload of blocks from appearing in the inserter at any one time – all of which contributes towards one of the project's main goals: to unify how content is added to posts.



"For a lot of common use cases, building a Gutenberg block takes a lot less work than trying to develop a comparable UI with meta boxes or shortcodes."

Nathaniel Taintor, WordPress Engineer at Human Made

#### 'Everything is a block'

The Gutenberg approach reimagines a web page, blog post, or any type of content as independent blocks that can be pulled together, reorganised, and experimented with. This is a big change for WordPress and one that is poised to accompany a dramatic shift in a trend toward a web environment that embraces richer, more consumable, and better-tailored 360° digital experiences.

WordPress' new block model:

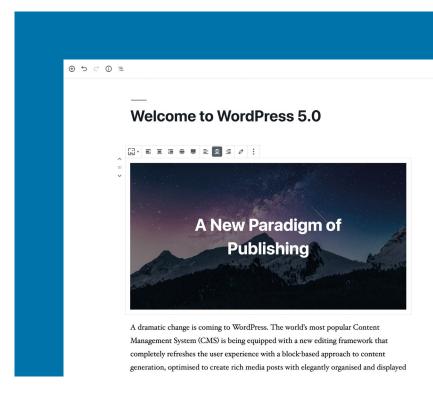
- Modernises the way content creation happens on WordPress, introducing a distraction-free editorial workspace and a new user experience and interface
- Creates elegant and consistent post layouts defined by pre-, auto-, or manually filled blocks
- Enables developers, designers, and content creators to use better tools to do their jobs more effectively
- Provides a faster, frictionless

editing experience to make content manipulation more efficient

- Enables you to work intuitively to create content on pages with drag and drop boxes, and newly exposed support for embeds across 34 different sites
- Opens a brand new avenue for the creation of custom features as plugins, custom code within themes, or as blocks to share and build upon

¹ https://wordpress. org/gutenberg/ handbook/ reference/designprinciples/

Below: The Gutenberg editor (cover block photo by Benjamin Voros on Unsplash).



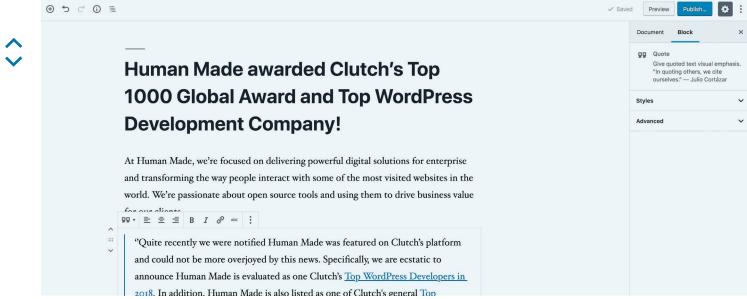
# 'The smart CMS' inside the Digital Experience Platform

Today in enterprise organisations, the 'digital experience platform' (DXP) is being presented as the new hub of business innovation and as an evolutionary next step from the CMS, promising to deliver 'Al-powered personalised experiences at scale'. And while the CMS remains a huge part of DXP, it's not necessarily the main driver.

The underlying motivation driving DXP is to provide smart solutions capable of offering interoperability with other technologies and services, and help drive engagement, conversion, and business value.

As demand for more specialised tools grows, WordPress can differentiate itself by focusing on its own specialism: creating, ingesting, distributing, editing, analysing, and manipulating content – through a flexible, reusable Gutenberg block model, and a powerful REST API.

Combined with a range of microservices and tools embedded inside WordPress, it can deliver the 'smart CMS' solution with all the benefits of open source software.



## Gutenberg in the newsroom

A CMS-agnostic editor for the open web, supporting fast-paced iterative experimentation

In 2017, Per André Rønsen, CIO at Norway-based agency Frontkom, came across Gutenberg in WordPress and decided they'd give it a try. They were working on a project, sponsored by <u>Google</u> <u>Digital News Initiative</u>, to create a front page builder. The project was successful, and inspired Rønsen to create a <u>Gutenberg module for Drupal</u>, tailoring it to the media industry and building functionality to support newsroom workflows.

Rønsen identifies this as a first step towards creating a CMS-agnostic Gutenberg editor; one that can benefit from contributions across the open source communities. Their enthusiasm for, and confidence in, Gutenberg is clear: This is not just a tool for WordPress, it is the 'editor for the open web'; keeping it decoupled from both CMSs is a priority. Their next step is building additional tools for publishers.

Above: Gutenberg in action on the Human Made blog.

## Personalisation and scalable revenue models

Austin Smith, CEO at Alley Interactive, has been Entrepreneur in Residence in 2018 for The Lensfest Institute, an institute designed to develop and support innovative and sustainable business models for local journalism. As part of his residency, Smith researched the state of local news, and published a report offering suggestions for newsrooms to scale economically.

Smith's report compares legacy models, such as display advertising, with modern digital models. It demonstrates the potential of open source technology to scale revenue for local news publishers and how display advertising can boost revenue when publishers have a large and well-identified audience.

Another school of thought sees experiments in <u>personalisation in</u>

the newsroom as an additional route to scaling revenue:

- NiemanLab published an analytical round up of Smith's report, identifying 'products' as one of the keys to scaling revenue in local newsrooms, and mutually beneficial collaboration between smaller organisations as an opportunity for growth.
- been experimenting with homepage layouts, creating a variety of options for readers.
- The BBC have been experimenting with different storytelling formats.<sup>2</sup>

The need for a tool that supports a fast-paced iterative approach is there, and in a practical sense, Gutenberg's commitment to semantic blocks makes it ideal for that purpose. Its flexible block model of reusable, nestable content units makes possible, and easy, the type of experimentation that helps publishers decide which storytelling formats work for their audience; in a way that might otherwise be costly, and drain resources and time.

<sup>2</sup> <u>https://medium.</u> com/bbc-newslabs/beyond-800words-prototypingnew-storyformats-for-newse3102e783b5f and http://www. niemanlab. org/2018/07/12prototypes-eightweeks-andlots-of-tappingwhats-workedand-hasnt-in-thebbcs-quest-fornew-storytellingformats/





## Changes and challenges

Gutenberg is here to stay – are you ready for it?

WordPress' evolution from an original blogging platform to a fully featured, flexible multimedia CMS, and latterly into a powerful application development framework, has confounded critics. As a publishing tool, WordPress has dominated in the sheer volume of its user base and is the most widely used CMS, and most popular publishing platform in the world. In many

ways, WordPress' familiar editing interface is the very definition of a user-friendly CMS.

As much as the new block model is set to accelerate that development, it's clear that major changes in a well-established ecosystem will raise challenges for many users. The engagement of the wider WordPress community with the Gutenberg project has illuminated many of these challenges; well-articulated concerns have been clearly voiced and many of these concerns have since been addressed.

Above: Joe Hoyle, CTO and Partner at Human Made, on stage at WordCamp Europe 2016.

## Backwards compatibility

Backwards compatibility describes software or hardware that is built to work with previous versions and continues to support features and functionality native to that of its predecessors. Backwards compatibility is a key WordPress feature and has been a huge focus, as well as a powerful differentiator, between WordPress and other competing CMSs.

Gutenberg has been developed alongside WordPress core with a view to merge it into WordPress 5.0 by the end of 2018, at which point Gutenberg will be fully compatible with all your existing WordPress content. However, it's likely some plugins and themes will need to be updated to ensure they work smoothly with the new editor. For this reason, it's advised that you check the functionality and compatibility of all your plugins with Gutenberg. For sites relying on incompatible thirdparty components, the 'Classic Editor' plugin will be officially supported until the end of 2021.

## Transitioning legacy code

For enterprises who have built a substantial amount of custom work into their WordPress editor, some of the bespoke functionality may no longer be necessary; or additional work will be required to ensure a seamless integration with Gutenberg. For those teams the solution is to start looking deeply into how the functionality they've built into their systems will be impacted by Gutenberg.

On the other hand, enterprises migrating their networks over to WordPress from a different CMS will find a huge selection of additional features now provided by Gutenberg straight out of the box, many of which used to require a lot of custom work.

At Human Made, we've been working with blocks for over a year, and we're already seeing huge acceleration in the development of simple ideas. Because there is a consistent set of interaction patterns across blocks, we've experienced easier, better, and faster UX optimisation.





# Blocks of opportunity: What's next?

A unified design language empowering content creators, editorial staff, and developers alike

Today Gutenberg begins as an editing tool; in the future, it will become the foundation for customising and building websites across the whole WordPress platform. Since the project started, the block editor has been presented as a bold and ambitious

plan to modernise WordPress' editorial experience and revolutionise the way we create and publish content on the web.

Until today there have been almost as many models for interacting with page elements (widgets, menus, images, etc.) as there are elements. Creating an interaction with a single consistent model will naturally improve usability. However, it's the architectural and technical improvements that will be the most profound change for enterprise users.

Block templates, defined in plugins and themes, have the capacity to be created with a rigid and pre-set structure or built flexibly from a variety of block Above: Noel Tock, CGO and Partner at Human Made, works on his keynote presentation, 'The Future of WordPress' for WordCamp Tokyo 2018. options. Being the first project in WordPress' core using the REST API, Gutenberg can change the way we interact with websites as a whole; it offers an explosion of possibilities to propel WordPress forward, and it is changing the way developers build digital

experiences on WordPress.
The block editor will be a key element of the major core
WordPress release 5.0. This release delivers a completely refreshed editing experience and content model, with complete backwards compatibility for all



"If there's a specialised tool for every need inside a tech stack then WordPress' specialisation is content: ingesting, creating, editing, analysing, manipulating, enhancing, and distributing content."

#### **Noel Tock**,

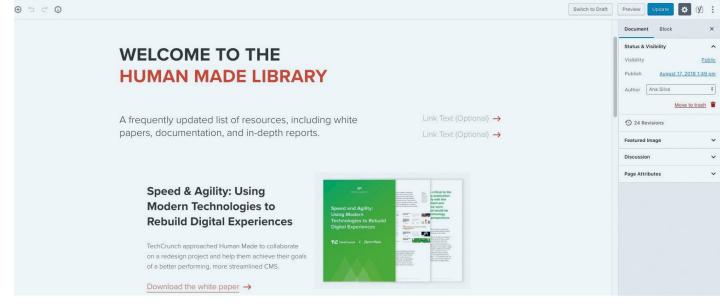
Partner and CGO at Human Made

content, and options to revert back to the Classic Editor with one click of a button. It's a bold but considered step forward for WordPress, and a great first step in this transformational journey.

Gutenberg has made a dramatic entrance in the WordPress world because it stands to propel WordPress forward into a future that – to some – seems very new. But the vision for its content model is broad and the technical ambition profound enough that we all stand to benefit from this leap into the future. The block editor is reimagining content generation to move away from shortcodes and a singular HTML blob, recognising that the modern digital publishing stack requires not rich text documents, but collections of independent, reusable objects that can be delivered inclusively to users on all ends of the technical and geographical spectrum.

We're now seeing the fruits of that bold investment in a dramatic refresh of the world's most popular CMS. WordPress in 2019 will look substantially different compared to its last ten years, showing us some of the most exciting opportunities for the future. Be prepared for a new WordPress platform, a new way of thinking about content, a new paradigm of publishing on the web.





## Human Made: WordPress, Gutenberg, and OSS

Bringing the best of open source to big publishers and enterprise

Human Made have taken a 'Gutenberg-first' approach early on. Since 2017, we have explored how the new block editor can be at the core of the solutions we propose to our clients. In January 2018, we integrated the block editor on our own

website, <u>humanmade.com</u>. We later published our experiences throughout this process, which included:

- Building 13 custom blocks
- Creating an editing UI that reflected their appearance on the front-end of the site
- Migrating existing site data into Gutenberg blocks with the help of a custom CLI script

Integrating Gutenberg on our own site enabled us to get firsthand experience of the editor, and the flexibility it provides, including some of the functionality necessary to ensure a site is usable and visually appealing. Above: Gutenberg on the Human Made website (Resources page). Although still in development at the time, Gutenberg seemed an extremely promising solution to many of our enterprise clients' requirements.

Human Made have been at the forefront of WordPress' transition towards tools like Node, React, and Webpack. We have released several projects that make it easier to use React within WordPress in the past; with Gutenberg, we have continued to explore state-of-theart techniques, like Hot Module Replacement – a process that allows developers to dramatically speed up prototyping work and code iterations. A developer can now rapidly iterate on block code, achieving all the benefits of hot module reloading in a WordPress-specific context. This creates more efficient testing workflows, enabling developers and website owners to make experimental changes quickly and with less overheard.

A year in with Gutenberg, we have made the block editor a first-class citizen within our development process at Human Made, and its positive reception by our clients has exceeded our expectations.

## Human Made and WordPress

WordPress is an open source content management system used to power millions of sites, blogs, and applications. It's extensibility, speed of innovation, and mature development community are just some of the things that make it the most popular CMS in the world, powering over 32% of the web.

The WordPress software is a highly-flexible and customisable open codebase, allowing you to build sites with modern technologies such as React or Node. It has evolved dramatically from a simple blogging platform, and has continued to expand its presence in the enterprise space, competing with technologies such as Drupal and Sitecore. With the merge of the REST API in core. WordPress experienced an explosion in the number and complexity of integrations possible, significantly expanding its capacity as a robust, scalable, and extraordinarily flexible platform.

Not only does it remain the most popular CMS in the world, it's flexibility means it's used by some of the most visited sites in the world and has been instrumental in the development of online platforms for huge brands such as News UK, TechCrunch, and USA Today. WordPress has broad appeal and has continuously demonstrated its capacity to modernise and evolve.

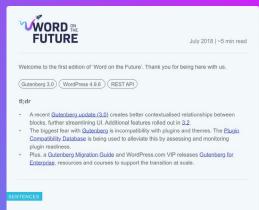
Human Made are one of the leading contributors to the WordPress project, and have been actively involved in developing the software since version 3.0. Our involvement in WordPress spans years of modifications and evolutions and we have seen dramatic changes to the way WordPress has been adopted across a range of industries and enterprises.

Below: The Human Made team on our annual company retreat, Petritoli, Italy, 2017.



# THE INDUSTRY NEWSLETTER FOR WORDPRESS

by Human Made



Gutenberg has now reached a complete MVP feature set; won't merge with core before August



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